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CLAIMS

*Subs*  
*C3*

1. A fuel control system for the reheat burners of a gas turbine engine, comprising a source of pressurized fuel, a plurality of metering valves for regulating fuel flow from said source to respective ones of a plurality of burner manifolds, and means operable when one of said metering valves is shut, for introducing fuel at predetermined reference pressure into the manifold associated with said one valve.

*C*

2. A system as claimed in claim 1 which includes a plurality of throttle valves between respective ones of said metering valves, <sup>means</sup> and their respective manifolds, one of said throttle valves including ports which, when said throttle valve is shut, connect said reference pressure to the manifold associated with said one throttle valve.

3. A system as claimed in claim 2 in which said one throttle valve is operable when closed to connect said reference pressure to a further manifold of the engine.

*a*

4. A system as claimed in ~~any preceding claim~~<sup>1</sup> which includes relief valves in the respective burner manifolds, said relief valves being arranged to lift at pressures greater than said reference pressure.

*Sub B1*

5. A valve for regulating pressure of a fluid, comprising a housing having first port for connection to a fluid pressure source by way of a flow restrictor and a second port for connection to a low pressure, an outlet port communicating with said first port, a control element for regulating flow between said first and second ports, and a device for urging said

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~~control element to increase said flow in response to an increase in pressure at said first and outlet ports.~~

B 6. A <sup>system</sup> ~~valve~~ as claimed in claim 5 in which said device is a pressure-responsive bellows and there is provided means for adjusting the pressure at said outlet port at which said control element interconnects said first and second ports.

7. A metering valve arrangement for regulating fuel flow from a pressure source to a gas turbine engine, comprising a body having an inlet, an outlet and a pressure return port, and a control element movable within said body to regulate flow between said inlet and outlet, said control element having a portion which uncovers said port to connect the latter to said outlet in a closed condition only of said control element in which flow between said inlet and outlet is prevented.

8. A valve arrangement as claimed in claim 7 which includes a flow restrictor in series between said pressure source and said outlet, whereby in said closed condition said pressure source is connected to said return pressure port.

9. A fuel supply system for a gas turbine engine, including a pump for supplying fuel from a reservoir to said engine by way of a metering valve, said metering valve comprising a body having an inlet communicating with an outlet of said pump, an outlet communicating with said engine, a pressure return port communicating with an inlet of said pump and a control element movable within said body to regulate flow between said inlet and outlet, said control element having a portion which uncovers said

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port to connect the latter to said outlet in a closed condition only of said control element in which flow between said inlet and outlet is prevented, whereby in a shut condition of said valve fuel downstream thereof is returned to the inlet of said pump.

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